

## Testimony before the House Environmental Regulation Committee regarding HB 1796

*Relating to the Offshore Geologic Storage of Carbon Dioxide*

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### Introduction

I salute Representative Warren Chisum for his wise and committed leadership reflected in HB 1796. Representative Chisum's leadership, through his creation of the Carbon Management Caucus and other national energy forums, has helped Texas identify pragmatic and optimal paths forward in the event of federal carbon dioxide (CO<sub>2</sub>) reduction mandates.

Carbon caps raise stakes unprecedented for Texas. Given the size of our population, the productivity of our economy, and the national scope of our energy sector, Texas would be far more impacted by proposed carbon caps than other states. For scale, consider the tax on carbon included in President Obama's recent budget. The President's budget anticipates federal revenue from a carbon tax of around \$650 billion, calculated at \$20 per ton of CO<sub>2</sub>. Later, administration officials acknowledged that the budget figures were too low and that they anticipate carbon tax revenues at more like \$1.3 trillion from a tax on carbon of \$50 per ton. Wow!

For a general gauge of what this carbon tax would cost Texas, multiply EPA's estimate of CO<sub>2</sub> from Texas in 2005 (approximately 670 million metric tons) times the tax per ton. Calculated at \$50 per ton, the amount of gross state product which would become federal tax revenue is approximately \$33 billion. This state, most certainly, should do something more than simply brace for the impact.

Yet, the factors which elevate carbon risk for Texas, also provide advantages for Texas in the development of carbon capture, storage, long term sequestration, and productive CO<sub>2</sub> use.

As "The Energy State," Texas has unmatched resources and expertise to develop carbon control technologies. If commercially available to the free market, these technologies would be of extraordinary economic value, not only for Texas enterprise, but for the entire country.

HB 1796 tackles a major part of this challenge by establishing a blueprint for the creation of a CO<sub>2</sub> repository for storage and permanent sequestration underneath submerged state-owned lands along the Gulf Coast.

Formidable challenges like aggressive caps on CO<sub>2</sub> from fossil fuel use—behind 87% of all U.S. energy use—require bold solutions. HB 1796's blueprint for creation of a large CO<sub>2</sub> repository is an appropriately bold response to potential federal mandates. Wisely, the legislation lays the groundwork for maximizing the economic benefit for the state of Texas and Texas business. I understand that the Bureau of Economic Geology's current studies indicate the state's submerged lands provide nearly ideal geologic features for safe storage of vast amounts of CO<sub>2</sub>, a capacity to store perhaps the total U.S. anthropogenic CO<sub>2</sub> for the next 1000 years. Fees charged for deposit of CO<sub>2</sub> could generate revenue for the state.

Importantly, the legislation identifies the many legal, technical, and financial variables for an offshore CO<sub>2</sub> repository. Regulatory standards for construction and operation—as well as for measurement, monitoring, and verification of permanent sequestration—would plow new ground for TCEQ. As acknowledged in the bill, EPA's expected regulation would preempt state-only standards. Shrewdly, the bill would create a mechanism for maximizing the financial

benefit to the state from future fees and/or carbon credits generated from storage. Given the complexity of these new regulatory, technical, and contractual issues, HB 1796 might include a preliminary study of alternative regulatory approaches and interagency jurisdictions.

I believe the most important part of the bill—and the only prescriptive provisions for the near term—is the pilot study to select the optimal location for the repository conducted by the Bureau of Economic Geology. This is now a legitimate first step which should be completed.

This bill apparently conditions exercise of the permissive authority given to TCEQ for standards, contracts, construction, and operation of the repository on prior federal enactment of mandatory greenhouse gas restrictions. This is critical. However likely carbon mandates may be, the state should not get ahead of pivotal federal decisions. The differences among the many congressional, administration, or EPA proposals are significant enough to warrant readiness, but not immediate deployment.

The complexity of the issues raised by creation of an offshore CO2 repository should not be underestimated. CO2 reduction, re-use, storage, and sequestration raise questions that are categorically different than conventional air emissions issues impacting ambient air quality. Consider how CO2 is wholly unlike the conventional pollutants regulated by EPA

and TCEQ. A part of nature's life-sustaining chemistry and an ubiquitous by-product of human activity, CO2 is not a ground-level pollutant with adverse health effects. Indeed, CO2 is a valuable commodity, used for 30 years in enhanced oil recovery and in many industrial processes. Future regulatory standards for a CO2 repository should be different than current regulations for underground injection of pollutants or hazardous waste. Indeed, infrastructure developed to transport CO2 to a repository like that envisioned in HB 1796 should facilitate the commercial re-use of captured CO2. The Gulf Coast's proximity to Mexico increases opportunities for the CO2 market in Mexico where Enhanced Oil Recovery (EOR) is needed to increase oil production from declining fields.

### Summary

In summary, HB 1796 offers a wise blueprint and an important pilot project to put Texas in a strategic position should the federal government enact carbon reduction mandates. This bill is a wise policy response to multiple federal policies on climate change. However inevitable carbon regulation may appear, mandates remain premature. Without cost-efficient, commercial-scale carbon control technology, carbon mandates will be an exorbitant addition to an already fragile economy. Further refinement of the new, game-changing empirical science of the natural variability of climate should precede onerous federal mandates. ★

